Year 6 – Autumn Block 2 – Four Operations – Order of Operations

About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

National Curriculum Objectives:

Mathematics Year 6: (6C9) Use their knowledge of the order of operations to carry out calculations involving the four operations

More Year 6 Four Operations resources.

Did you like this resource? Don't forget to review it on our website.

Step 13: Order of Operations

Introduction

Complete the calculations.

A. 3^3 =

B. 9^2 =

C. 12 x 9 =

D. 48 + 27 =

E. 11 x 7 =

F. 8^2 =

G. 5^3 =

H. 159 – 78 =

Introduction

Complete the calculations.

A. $3^3 = 9$

B. $9^2 = 81$

C. $12 \times 9 = 108$

D. $48 + 27 = 75$

E. $11 \times 7 = 77$

F. $8^2 = 64$

G. $5^3 = 125$

H. $159 - 78 = 81$

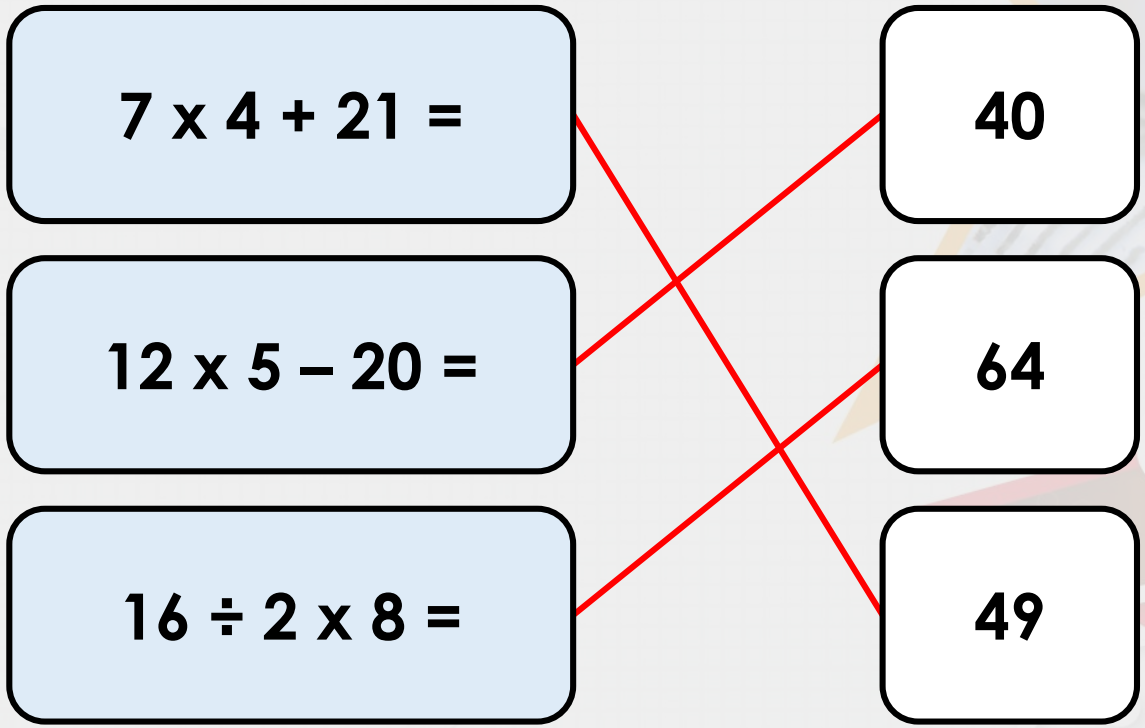
Varied Fluency 1

Match the calculation to the correct answer.

7 x 4 + 21 =	40
12 x 5 – 20 =	64
16 ÷ 2 x 8 =	49

Varied Fluency 1

Match the calculation to the correct answer.



Varied Fluency 2

Find the missing number.

$3 + 28 \div$  $= 10$

Varied Fluency 2

Find the missing number.

$$3 + 28 \div 4 = 10$$

Varied Fluency 3

Which calculation below gives the following answer?

68

(3 + 7) x 8 – 10	(16 + 2) x 4 – 2
10 x 7 – 2	8 x (10 – 2) + 2

Varied Fluency 3

Which calculation below gives the following answer?

68

(3 + 7) x 8 – 10	(16 + 2) x 4 – 2
10 x 7 – 2	8 x (10 – 2) + 2

Varied Fluency 4

Add brackets to each calculation to make them correct.

$5 + 4 \times 11 = 99$

$12 \times 20 - 8 = 144$

$16 \div 2 \times 8 - 2 = 48$

Varied Fluency 4

Add brackets to each calculation to make them correct.

(5 + 4) x 11 = 99

12 x (20 – 8) = 144

16 ÷ 2 x (8 – 2) = 48

Problem Solving 1

Use the following numbers to create a calculation with the answers below.

4	3	12

Answer	Calculations
144	
84	

Problem Solving 1

Use the following numbers to create a calculation with the answers below.

4	3	12

Answer	Calculations
144	3 x 12 x 4
84	(3 + 4) x 12

Reasoning 1

Josh is completing this calculation:

$$8 \times 5 + 20 \div 10$$

The answer is 6. I did
8 x 5 = 40, then
40 + 20 = 60, then
60 ÷ 10 = 6.

Josh

Is he correct? Explain how you know.

Josh is completing this calculation:

$$8 \times 5 + 20 \div 10$$

The answer is 6. I did
8 x 5 = 40, then
40 + 20 = 60, then
60 ÷ 10 = 6.

Josh

Is he correct? Explain how you know.
Josh is incorrect…

Reasoning 1

Josh is completing this calculation:

$$8 \times 5 + 20 \div 10$$

The answer is 6. I did
8 x 5 = 40, then
40 + 20 = 60, then
60 ÷ 10 = 6.

Josh

Is he correct? Explain how you know.

Josh is incorrect, the answer is 42. Multiplication and division come first, then subtraction and addition. 8 x 5 = 40, 20 ÷ 10 = 2, then 40 + 2 = 42.

Problem Solving 2

Work out which child has which calculation from their given answers.

6 x 4 + 8 – 2

6 x (4 + 8) – 2

Sinead

My answer 70.

My answer is 30.

Hafsa

Problem Solving 2

Work out which child has which calculation from their given answers.

6 x 4 + 8 – 2

6 x (4 + 8) – 2

Sinead

My answer 70.

My answer is 30.

Hafsa

Sinead: 6 x (4 + 8) – 2 = 70
Hafsa: 6 x 4 + 8 – 2 = 30